To: Lewis Linker[LLinker@chesapeakebay.net]
From: Batiuk, Rich
Sent: Wed 8/20/2014 4:13:25 PM
Subject: Re: CMAQ Scenarios for Chesapeake Bay Program
MAIL_RECEIVED: Wed 8/20/2014 4:13:27 PM

Lew-
Thanks for keeping the pressure on our air modeling colleagues and reminding them of key dates.

Thanks Rich

Sent from my iPhone

> On Aug 20, 2014, at 12:05 PM, "Lewis Linker" <LLinker@chesapeakebay.net> wrote:
>
> Hi Robin and Norm:
> This is a good time to check on the progress on the 2002, 2011, 2017, and 2025 CMAQ scenarios. We have a series of upcoming major Chesapeake Bay Program meetings that will be reviewing the new CMAQ work. The first meeting is the October CB Modeling Quarterly Review on 9/30-10/1 followed a week later on October 7-8 by a key CBP decision making group called the Water Quality Goal Implementation Team. When it rains it pours! We also have a need to schedule a meeting on the new Chesapeake CMAQ model runs with EPA's Region 3 and CBP higher management sometime in October.
>
> A good way to get things kicked off for the series of presentations in October would be to preview the CMAQ scenario work at one on our regular Tuesday Modeling Workgroup planning meetings from 1:00 to 3:00. Can we schedule an initial meeting on the CMAQ progress on the 26th or on September 2?
>
> Thanks for your help guys. Looking forward to seeing these new runs.
> - Lew
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> -----Original Message-----
> From: Possiel, Norm [mailto:Possiel.Norm@epa.gov]
> Sent: Thursday, July 10, 2014 11:50 PM
> To: Lewis Linker; Dennis, Robin
> Cc: Gary Shenk; Rich Batiuk
> Subject: RE: CMAQ Scenarios for Chesapeake Bay Program
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> Lew,
>
> The emissions used for our air quality modeling scenarios are, to a large extent, independent of the level of the NAAQS in place in the time (year) of the emissions data.
>
> You are correct that the base year emissions for 2002 and 2011 are intended to reflect actual emissions during these years. These inventories should account for specific stationary sources controls that were implemented to meet a certain NAAQS.
>
> Even though the 75 ppb NAAQS was in place at the time of the 2011 inventory, nonattainment areas do not have to show attainment of this NAAQS until 2017/2018 or beyond. In fact, states are not required to submit SIPs with controls to attain the 75 ppb NAAQS until summer 2015. So, the 2011 inventory does not reflect controls needed to attain the 75 ppb NAAQS.
>
> Regarding the future year cases (2018 and 2025), the emissions for these scenarios reflect growth plus emissions reductions from final national rules, OTC rules, and any additional local "on the books" control measures that we could glean from attainment SIPs for previous NAAQS or from comments by states/industry on our projection inventories. Often, areas attain with just national rules without the need for additional local measures. Thus, we are not making any assumptions about controls to attain a particular the level of the NAAQS when creating the emissions for our future base case air quality modeling.
>

> As you may know, EPA prepares a Regulatory Impact Assessment (RIA) for every NAAQS. The RIA includes estimates of the costs and health/welfare benefits of attainment of the proposed and final NAAQS. The costs and benefits are based on "illustrative" analysis of possible controls that could be used to help reach attainment. In most cases, however, the suite of potential control measures is insufficient to provide full attainment in all areas. In such cases we use an algorithm for estimating the costs of "unknown" controls. The RIA for the new ozone NAAQS is expected to be released at the time of the proposal of the standard which is in December of this year.
>
> All of this may be more than you wanted to know, but hopefully I answered the questions in your email below. If not, let me know and I'll try again.
>
> Norm
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> _____
> From: Lewis Linker [LLinker@chesapeakebay.net]
> Sent: Wednesday, July 9, 2014 4:39 PM
> To: Lewis Linker; Possiel, Norm; Dennis, Robin
> Cc: Gary Shenk; Batiuk, Rich
> Subject: RE: CMAQ Scenarios for Chesapeake Bay Program
>
> Hi Norm:
> We're looking forward to getting your CMAQ Scenarios of atmospheric deposition of nitrogen to the Chesapeake watershed and tidal Bay, but a chat with Robin today raised a few questions in my mind. For the 2002 and 2011 CMAQ scenarios, I would guess that the NOx emissions input used would be the actual measured estimates. However, for the 2018 and 2025 scenarios it would be good to know what ozone standards will be projected. When we did the 2020 Allocation Air CMAQ Scenario for the Chesapeake TMDL we used a CMAQ scenario that was run in 2007 when the ozone standard was 0.080 ppm. Now the ozone standard is 0.075 ppm, and this, of course, would be reflected in the 2011 Scenario your doing now.
>
> Looking forward, a good guess of where the ozone standard will be in 2025 would not be 0.075 ppm. A better guess would be something like 0.070 ppm or lower. So the question is, "What assumption will we be making for the 2025 CMAQ Scenario?" (and the 2018 scenario for that matter).
>
> Thanks for your response Norm. Also, this is reminder that we'd like to have you or Robin give a short presentation (15 minutes) to introduce the new CMAQ scenarios during the Modeling Workgroup's September 2014 conference call and then a full presentation of the CMAQ work and future plans for the 2005-2011 continuous 2005-2012 at the October Quarterly Review.
>
> All the best to you Norm,
> - Lew
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> From: Lewis Linker
> Sent: Wednesday, June 25, 2014 2:39 PM
> To: 'Possiel, Norm'; Dennis, Robin
> Cc: Gary Shenk; Rich Batiuk
> Subject: RE: CMAQ Scenarios for Chesapeake Bay Program
>
> Great, thanks for the update Norm. The CMAQ updates are important to us and we appreciate your help. Based on your timeline I think we should have a short presentation (15 minutes) to introduce the new scenarios during the Modeling Workgroup's September 2014 conference call and then a full presentation of the CMAQ work and future plans for the 2005-2011 continuous 2005-2012 at the October Quarterly Review. How does that sound?
>
> All the best,
> - Lew
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> From: Possiel, Norm [mailto:Possiel.Norm@epa.gov]
> Sent: Wednesday, June 25, 2014 1:49 PM
> To: Lewis Linker; Dennis, Robin
> Cc: Gary Shenk; Rich Batiuk
> Subject: RE: CMAQ Scenarios for Chesapeake Bay Program
>
> Lew,
>
> We won't have the modeling results for these scenarios by July 22/23. The 2011 CMAQ run is in-progress and should finish by the end of next week. The emissions are ready for 2018 and 2025, but the emissions for 2002 are still being developed. CMAQ runs for 2018, 2025, and 2002 will be made sequentially starting after the 2011 run is completed. We expect to be able to provide the deposition outputs for all cases by the end of August.
>
> Norm
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> From: Lewis Linker [mailto:LLinker@chesapeakebay.net]
> Sent: Wednesday, June 25, 2014 1:30 PM
> To: Dennis, Robin; Possiel, Norm
> Cc: Gary Shenk; Batiuk, Rich
> Subject: RE: CMAQ Scenarios for Chesapeake Bay Program
>
> Robin and Norm:
> We have a Modeling Quarterly Review Meeting coming up the July 22-23. Would this be a good time to get the first 3 scenarios of 2010, 2017, and 2025 using the bidirectional ammonia CMAQ simulation and a 2002 emissions data base as described below? It would be timely to get this new information in front of the Chesapeake Bay Program managers & Modeling Workgroup.
>
> Thanks!
> - Lew
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> From: Lewis Linker
> Sent: Thursday, April 10, 2014 6:47 PM
> To: 'Dennis, Robin'; Norm Possiel (possiel.norm@epa.gov<mailto:possiel.norm@epa.gov>)
> Cc: Gary Shenk; Rich Batiuk
> Subject: CMAQ Scenarions for Chesapeake Bay Program
>
> Hi Robin:
> It was good chatting with you today. I understand from our talk that Norm is preparing to provide to the Chesapeake Bay Program new CMAQ scenarios that use the bidirectional NH4 simulation. The new scenarios will be of 2011 (which includes the 2010 CAIR implementation) 2017 (which includes implementation of the Tier 3 Fuel Rule) and 2025 (the year when all CBP implementation for the TMDL is to be completed). The three scenarios will all use 2002 emissions. Norm, you should know that getting the three above scenarios to the CBP by the July/August 2014 timeframe will be fine.
>
> Also Robin, you had described a series of scenarios coming after Norm's three scenarios. The scenarios would use the latest version of the CMAQ bidirectional ammonia and would be for 2005 to 2012 with each of the year having its own separate 2005 to 2012 emission and meteorological data sets. A 2025 Scenario will be run on the latest CMAQ version as well. I think you had said too that there would be some provisions made to be able to see the differences with the 2002 emission data set we used for the CMAQ scenarios developed for the 2010 TMDL.
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> Please let me know if I'm missing anything and, as always, thank for your help Robin and Norm.
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> Best,
> - Lew
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